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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,666	08/31/2001	Eleanor G. Rieffel	110012	7817

25944 7590 06/28/2005

OLIFF & BERRIDGE, PLC  
P.O. BOX 19928  
ALEXANDRIA, VA 22320

EXAMINER

BRIER, JEFFERY A

ART UNIT PAPER NUMBER

2672

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/942,666

**Applicant(s)**

RIEFFEL ET AL.

**Examiner**

Jeffery A. Brier

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-69 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 68 is/are allowed.
- 6) ☒ Claim(s) 1-13, 16-21, 24-34, 37-41, 44-67, and 69 is/are rejected.
- 7) ☒ Claim(s) 14, 15, 22, 23, 35, 36 and 43 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/31/01 & 6/19/02.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

***Detailed Action***

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 4, 6, 7, 9-12, 21, 26-28, 30-33, 39, 41, and 44-66 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 6, 26, and 49:

These claims claim "at least one of ... succeeding digital ink, and an intonation phrase". In view of *Super Guide v DirectTV* this phrase is inclusive rather than alternative. The specification's paragraph 0037 describes the claimed list in alternative form. Thus, these claims do not distinctly claim the described invention. *SuperGuide Corp. v. DirectTV Enterprises Inc.*, 69 USPQ2d 1865 (CA FC 2004).

Claims 4, 9, 10, 11, 21, 30, 31, 32, 41, 47, 52, 53, 54, and 64:

These claims also claim "at least one of", therefore they are indefinite for the same reasons given above.

Claims 7, 12, 27, 28, 33, 50, and 55:

These dependent claims do not correct the above noted problems in their parent claims.

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Claims 11 and 54 claim the video is start of audio which appears to be technically incorrect since video and audio signals are separate.

Claim 39:

At line 3 "the non-fading digital ink" lacks antecedent basis in the claim since the alternative nature of this claim expresses switching from a non-fading digital ink to a fading digital ink.

Claims 44-66:

Claim 44 claims "the computer readable program code usable to program a computer to program a method". This has several problems. The first is the "usable" term which may leave the computer readable medium outside of the computer but still be "usable to program". The second is the phrase "to program a computer to program a method".

Applicant described invention does not have a computer program a method but rather a computer performs a method.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-9, 11, 13, 16-21, 24-30, 32, 34, 37-41, 44-52, 54, 56, 59-64, 67, and 69 are rejected under 35 U.S.C. 102(b) as being anticipated by the article by Dongqiu Qian and M. D. Gross describing NetDraw titled Collaborative Design with NetDraw, 1999, Proceedings of Computer Aided Architectural Design (CAAD) Futures '99, Georgia Institute of Technology, Atlanta, Georgia, USA, June 7-8, 1999 pp213-226 which may be found at: <http://depts.washington.edu/dmgftp/publications/pdfs/caadfutures99-netdraw.pdf>

and  
<http://dmg.caup.washington.edu/xmlSiteEngine/browsers/static/publication29.html>

This article describes on page 6 :

NetDraw provides two collaborative functions: Draw and Chat. NetDraw's drawing features include: object based graphical editing, gestures that fade away over time, graphical underlay, grouping and graphical constraints, and recording design history snapshots. NetDraw's text-based chat offers a substitute for face-to-face conversation or video links. Figure 1 shows the chat window. At the top is a oneline type-in area; on the bottom a multi-line text field displays the conversation transcript. Whenever one user types a sentence, it appears on the screens of all other users. NetDraw prefaces each sentence with the author's name.

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This article describes on page 7:

NetDraw can also use a graphical image as the background of the drawing surface. The image may reside on the local machine or on any Web server. This image could be a topographic base map or a sketched design drawing imported from another program. The designer can link objects with descriptive text. The text can simply indicate the object's name, e.g. "table", "kitchen", or it can provide information about the object. Each user also controls whether to display the text associated with each object. Besides the normal graphical objects offered by other drawing packages, NetDraw also provides a 'gesture' object. A designer can draw a gesture on the drawing surface; like other drawing objects, it will appear on every other designer's screen. However, unlike ordinary drawing objects, gesture objects are temporary; they fade away over a short period of time. Designers can draw attention to a specific area of the drawing surface with a gesture. A designer can use a gesture object not only to draw attention, but also to discuss their design concepts with others.

A detailed analysis of the claims follows.

#### Claim 1

The Qian article teaches a method for generating temporary digital ink (See *sections 3 and 3.1 and figure 2.*) on a media (*Figure 2 shows a drawing media.*), comprising,

selecting at least one digital ink to fade (*Pages 6 and 7 discuss gestures that fade.*); and

applying the at least one digital ink on a media (*Each user of the collaborative drawing environment may leave digital ink on the graphical drawing. See figures 2 and 3.*); and fading at least one of the selected at least one digital ink based on at least a first condition (*The digital ink representing the gestures visually fades over time.*).

Claim 2:

The Qian article teaches the method according to claim 1, wherein the media is a collaboratively shared media (*The NetDraw computer program is a collaborative work environment allowing many users to interact in an architecture design process.*).

Claim 3:

The Qian article teaches the method according to claim 1, wherein selecting digital inks to fade is based on at least a second condition (*Claim 4 defines one of the second conditions as time which Qian clearly teaches, here, the first condition would be the creation of the gesture since the fading process begins with the creation of the digital ink representing the gesture visually on the display.*).

Claim 4:

For this art analysis the list of second conditions will be analyzed as if applicant intended the list to be alternative.

The Qian article teaches the method according to claim 3, wherein the second condition is at least one of

user specification (*The user specified the gesture by forming the gesture which begins to fade after the digital ink representing the gesture has been created.*),

time (*The digital ink fades over time, see pages 6 and 7 in the paragraphs reference above in the beginning of this rejection.*),

importance of marks (*The gestures are given "an importance" by the designer of having the important enough to be displayed and having them fade over time.*),

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user identification (*The article appears to be silent as to having the fading be influenced by user identification.*),

percentage of display area marked (*The article appears to be silent as to having the fading be influenced by percentage of display area marked.*).

Claim 5:

The Qian article teaches the method according to claim 1, wherein the digital ink is a referent gesture (*This article teaches referent gestures because the gestures are used by the users to refer to among many things changes that need to be made to the drawing.*).

Claim 6:

For this art analysis the list of second conditions will be analyzed as if applicant intended the list to be alternative.

The Qian article teaches the method according to claim 1, wherein the first condition is a predetermined time, the predetermined time based on at least one of;

a first stroke of the digital ink (*After the digital ink is formed the gesture begins to fade. A stroke is considered to be continuous ink forming a gesture.*),

completion of the digital ink (*The total time the digital ink for the complete gestures to fade is dependent upon the length of the digital ink. It appears to digital ink for a gesture fades as a whole.*),

appearance of the first stroke of the digital ink to users who did not apply the digital ink (*In the paragraph spanning pages 11 and 12 the author proposing a*



*modification that will allow the gesture fade time to vary. This is in response to how the gesture appeared to users who did not make the gesture.),*

appearance of the completed digital ink to the users who did not apply the digital ink (*In the paragraph spanning pages 11 and 12 the author proposing a modification that will allow the gesture fade time to vary. This is in response to how the gesture appeared to users who did not make the gesture.),*

a first stroke of succeeding digital ink is applied (*Many gestures may be applied by the same user of different users with the gestures as a whole fading and individually fading and the last gesture to be made is the last to fade away.),*

completion of the succeeding digital ink (*Many gestures may be applied by the same user of different users with the gestures as a whole fading and the next gesture to be made is the next to fade away.),* and

an intonational phrase (*In the paragraph spanning pages 11 and 12 the author proposing a modification that will allow the gesture fade time to vary. This is in response to how the gesture appeared to users who did not make the gesture which implies how the user who made the gesture intended the gesture to be viewed as if the user were speaking to the other users.).*

Claim 7:

The Qian article teaches the method according to claim 6, wherein the intonational phrase is based on an intonational phrase (*This is not limited to voice phrases but includes visual gestures that convey intonational phrases.)* accompanying the digital ink.

Claim 8:

The Qian article teaches the method according to claim 1, wherein the first condition is a command from the user (*The word command is a broad term and is met by the user writing with an input device a gesture.*).

Claim 9:

For this art analysis the list of second conditions will be analyzed as if applicant intended the list to be alternative.

The Qian article teaches the method according to claim 1, wherein the first condition is at least one of an

audio input and

a video input (*The article clearly teaches a video input because the gesture is visual. When the video of the digital ink is superimposed upon the video of the drawing then the portion of the program that controls display of the gesture's digital ink begin to fade the digital ink.*).

Claim 11:

For this art analysis the list of second conditions will be analyzed as if applicant intended the list to be alternative.

The method according to claim 9, wherein the video input is at least one of start of audio detection (this should be start of video detection),

end of video detection, and

an identification of the video input (*The article clearly teaches a video input because the gesture is visual. When the video of the digital ink is superimposed upon*

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*the video of the drawing then the portion of the program that controls display of the gesture's digital ink begin to fade the digital ink.).*

Claim 13:

The Qian article teaches the method according to claim 1, wherein the digital ink fades at predetermined speed (*The algorithm in the computer program that controls fading is a predetermined algorithm, thus, the speed of fading is predetermined.*).

Claim 16:

The Qian article teaches the method according to claim 1, wherein the digital ink fades completely (*The article discusses the digital ink fades away over time.*).

Claim 17:

The Qian article teaches the method according to claim 1, wherein the digital ink partially fades (*This claim does not differentiate between an intermediate stage of the fading process or the end of the fading process, thus, since Qian teaches fading over time then an intermediate stage of fade teaches this claim.*).

Claim 18:

The Qian article teaches the method according to claim 1, further comprising, switching the at least one of the selected at least one digital ink to a non-fading digital ink (*On page 11 gesture duration is discussed as being too short for some users, since the NetWare application is a drawing program then most gestures can be created as part of the drawing program or as part of the gesture program, thus, this article teaches to one of ordinary skill in the art to select either non-fading ink to display a permanent*

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*gesture or to use fading ink to display a temporary gesture. This claim does not claim how the switching occurs therefore this broad claim may be performed by NetWare.).*

Claim 19:

The Qian article teaches the method according to claim 18, further comprising, switching the non-fading digital ink to a fading digital ink. *(On page 11 text gestures is discussed as being added to fading gestures, since the claim does not claim how the switching occurs then this statement teaches the claim by changing to change non-fading text to fading text.).*

Claim 20:

The Qian article teaches the method according to claim 1, further comprising, changing display attributes of the at least one of the selected at least one digital ink based on the first condition *(Fading of digital ink is one form of changing the display attributes of the digital ink.).*

Claim 21:

For this art analysis the list of second conditions will be analyzed as if applicant intended the list to be alternative.

The Qian article teaches the method according to claim 20, wherein the display attributes include at least one of a

*color (As the digital ink fades it becomes less visible thus to the user the color of the ink changes to be closer to the surrounding background color.),*

thickness (See the 103 rejection) and

shape (See the 103 rejection)

of the selected digital inks.

Claims 24-30, 32, 34, and 37-41:

These claims are system claim versions of method claims 1-9, 11, 13, and 16-21 and they are rejected for the same reasons given for claims 1-9, 11, 13, and 16-21.

Additionally the article teaches a system.

Claims 44-52, 54, 56, 59-64,

These claims are computer readable storage medium claim versions of method claims 1-9, 11, 13, and 16-21 and they are rejected for the same reasons given for claims 1-9, 11, 13, and 16-21. Additionally the article teaches a system using a computer readable medium.

Claim 67

This claim is a carrier wave encoded to transmit version of method claims 1-9, 13, and 16-21 and they are rejected for the same reasons given for claims 1-9, 13, and 16-21.

Additionally the article teaches a system using a computer and a computer readable medium for storing the program and inherently a carrier wave exists between the computer and the computer readable medium.

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Claim 69:

This method claim is slightly more narrow than method claim 1 with the narrowing being present in the additional changing display attributes step. Qian teaches changing the display attributes by fading the displayed digital ink.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 21, 41, and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over the article by Dongqiu Qian and M. D. Gross describing NetDraw titled Collaborative Design with NetDraw in view of Fukuda, U.S. Patent No. 6,329,991

This article describes broadly changing the color of the digital ink representing the gesture as the digital ink fades.

Fukuda teaches fading digital ink over time. The fading is performed by changing the intensity of the digital ink, the color of the digital ink, or thickness of the digital ink.

It would have been obvious to one of ordinary skill in the art at the time of the invention to control the color of the digital ink over time or to control the thickness of the digital ink over time or to control the shape of the digital ink over time in NetWare in view of Fukuda because Fukuda teaches the usefulness of controlling digital ink over time by these display attributes so the user may know the age of the gesture and so it does not clutter the display space with many digital inks.

Claim 21:

For this art analysis the list of second conditions will be analyzed as if applicant intended the list to be alternative.

The Qian article teaches the method according to claim 20, wherein the display attributes include at least one of a

color (As the digital ink fades it becomes less visible thus to the user the color of the ink changes to be closer to the surrounding background color. Fukuda clearly teaches controlling the color of the digital ink over time.),

thickness (The Qian article appears to be silent about controlling the thickness of the digital ink over time. Fukuda teaches controlling the thickness of the digital ink over time.) and

shape (The Qian article appears to be silent about controlling the shape of the digital ink over time. The term shape is broad and is met by Fukuda controlling the thickness of the digital ink or is met by that which is taught by Fukuda's figures 5 and 9 with the showing hashed lines to represent the age of the digital ink. The courts have

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upheld that a drawing may by itself be used as a teaching of what it teaches to one of ordinary skill in the art.)

of the selected digital inks.

Claim 41:

This claim is a system claim version of method claim 21 and it is rejected for the same reasons given for claim 21. Additionally the article teaches a system.

Claim 64:

This claim is a computer readable storage medium claim versions of method claims 1-9, 13, and 16-21 and they are rejected for the same reasons given for claims 1-9, 13, and 16-21. Additionally the article teaches a system using a computer readable medium.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The article by Carl Gutwin, *Traces: Visualization of Interaction*, 1999 teaches a collaborative system where gestures are drawn and over time fade away. The article may be found at:

<http://hci.usask.ca/publications/1999/traces-tr/traces-tr.pdf>

## **Traces: Visualization of Interaction**

*Carl Gutwin*

Department of Computer Science

University of Saskatchewan

57 Campus Drive

Saskatoon, Saskatchewan, S7N 5A9, Canada

Tel: 1-306-966-8646

E-mail: [gutwin@cs.usask.ca](mailto:gutwin@cs.usask.ca)

1999



On page 2 this article discusses :

**PERSISTENT GESTURES**

Gestural communication is an ubiquitous part of collaboration in both physical and virtual shared workspaces [18,19]. Gestures are used to indicate objects or locations to others, to trace paths, and to demonstrate an action or manipulations before it happens. However, gestural communication with telepointers is often hard to see and hard to interpret. This is because telepointers are small, gestures usually happen quickly, and network delays often make telepointer motion jumpy compared with a local mouse cursor.

Increasing the visibility and persistence of telepointer gestures can improve gestural communication in shared workspaces. To do this, a trace-telepointer leaves a trail behind it on the screen, a line that gradually fades away (see Figure 1). The last few moments of the cursor's movement are always visible, providing others in the workspace with more time to see and interpret the gesture.

***Allowable Subject Matter***

8. Claims 10, 12, 31, 33, 42, 53, 55, 57, 58, 65, and 66 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. Claims 14, 15, 22, 23, 35, 36, and 43 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 68 is allowed.

Claims 10, 31, and 53:

The prior art of record fails to teach or suggest the method according to claim 9, wherein the audio input is at least one of start of audio detection, end of audio detection, or an identification of the audio input.

Claims 12, 33, and 55:

The prior art of record fails to teach or suggest wherein the audio input is an intonational phrase.

Claims 14, 35, and 57:

The prior art of record fails to teach or suggest wherein the predetermined speed is based on a user identification.

Claims 15, 36, 58, and 68: The prior art of record fails to teach or suggest wherein the predetermined speed depends on an importance determination of a word in the media marked by the digital ink.

Claims 22, 23, 42, 43, 65, and 66: The prior art of record fails to teach or suggest further comprising, selecting a faded or fading digital ink; and recovering the selected faded or fading digital ink.


23. The method according to claim 22, further comprising, making the recovered digital ink permanent on the document.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffery A Brier whose telephone number is (571) 272-7656. The examiner can normally be reached on M-F from 7:00 to 3:30. If attempts to

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reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi, can be reached at (571) 272-7664. The fax phone Number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jeffery A Brier  
Primary Examiner  
Art Unit 2672